

## **ABSTRACT OF THE DISCLOSURE**

A modified adenovirus capable of overcoming the problem of low level of coxsackie-adenovirus receptor (CAR) expression on tumor cells and methods of using such adenovirus are provided. The fiber protein of the adenovirus is modified by insertion or replacement so as to target the adenovirus to tumor cells, and the replication of the modified adenovirus is limited to tumor cells due to specific promoter control or mutations in E1a or E1b genes.